

1. (Twice Amended) A method for coating solid particles comprising the steps of

(a) adding solid particles to a liquid coating solution or precursor solution to form a liquid coating slurry containing a coating precursor, solvent for the precursor and the solid particles dispersed therein whereby the precursor material is not precipitated until after spraying.

(b) spraying the coating slurry to form droplets containing at least one particle.

(c) passing the droplets through a zone where the droplets are dried and form dry coated particles wherein the coating material is formed from the coating solution or the precursor solution, and

(d) heat treating the coating material on the particles to remove volatile matter from the coating material.

4. (Twice Amended) The method of claim 3 wherein the particles are less than about 100 microns in diameter, dilution ratio in the coating slurry of milliliters of coating solution or precursor solution per gram of phosphor particles is 100-5000, thickness of the coating material on the particles is 1-1000 nm, velocity of the droplets in the zone is 0.1-1000 cm/sec in the droplet direction and residence of the droplets in the zone is from instantaneous to a fraction of a minute.

5. (Amended) The method of claim 3 wherein the particles are less than about 50 microns in diameter, temperature in the zone is 100-500°C, dilution ratio in the coating slurry of milliliters of

coating solution or precursor solution per gram of phosphor particles is 200-3000, thickness of the coating material on the particles is 2-200 nm, velocity of the droplets in the zone is 1-50 cm/sec in the droplet direction, and residence time of the droplets in the zone is 0.1-10 seconds.

16. (Amended) The method of claim 15 wherein the particles are less than about 100 microns in diameter, dilution ratio in the coating slurry of milliliters of coating solution or precursor solution per gram of phosphor particles is 100-5000, thickness of the coating material on the particles is 1-1000 nm, velocity of the droplets in the zone is 0.1-100 cm/sec in the droplet direction and residence of the droplets in the zone is from instantaneous to a fraction of a minute.

17. (Amended) The method of claim 16 wherein the particles are less than about 50 microns in diameter, temperature in the zone is 100-500°C, dilution ratio in the coating slurry of milliliters of coating solution or precursor solution per gram of phosphor particles is 200-3000, thickness of the coating material on the particles is 2-200 nm, velocity of the droplets in the zone is 1-50 cm/sec in the droplet direction, and residence time of the droplets in the zone is 0.1-10 seconds.

20. (Twice Amended) The method of claim 13 wherein said heat-treating step is carried out at 300-1500°C over a period of 0.1-24 hours and wherein the coating material is selected from the group consisting of indium tin oxide, silicon dioxide, magnesium